Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1	1.	(Currently amended) A method of establishing a network resources reservation for an
2		anticipated traffic flow along a path in a network between an anticipated source and an
3		anticipated receiver of the traffic flow, wherein the anticipated receiver otherwise cannot
4		facilitate establishing the network resources reservation, the method comprising the steps
5		of:
6		detecting ~~an~~ a first RSVP Path message associated with the anticipated receiver of the
7		anticipated traffic flow at a proxy node located within the path;
8		determining whether to establish the network resources reservation;
9		generating an RESV message to reserve network resources for the anticipated traffic
10		flow; ~~and~~
11		communicating the RESV message to the anticipated source of the anticipated traffic
12		flow;
13		wherein the step of determining whether to initiate an RSVP reservation process includes
14		the steps of:
15		determining one or more network parameter values associated with the anticipated
16		traffic flow;
17		determining one or more transport parameter values associated with the
18		anticipated traffic flow;
19		determining next and previous hop parameter values associated with the
20		anticipated traffic flow; and
21		correlating at least one of the ascertained network parameter, transport parameter,
22		next hop parameter, and previous hop parameter values with information
23		defining a relationship between them and whether a RESV message is
24		desired.

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1 2. (Original) A method as recited in claim 1, further comprising the step of determining one

2   or more device and traffic parameter values associated with the anticipated traffic flow,

3   and wherein the step of generating the RESV message comprises the step of generating

4   the RESV message based on at least one of the device and traffic parameter values.

1 3. (Currently amended) A method as recited in claim 1, further comprising the steps of:

2   receiving predefined policy information; and

3   generating the RESV message based on the predefined policy information.

1 4. (Currently amended) A method as recited in claim 1, ~~wherein the step of determining~~

2   ~~whether to initiate an RSVP reservation process includes the steps of:~~

3   ~~determining one or more network parameter values associated with the anticipated traffic~~

4   ~~flow;~~

5   ~~determining one or more transport parameter values associated with the anticipated traffic~~

6   ~~flow;~~

7   ~~determining next and previous hop parameter values associated with the anticipated~~

8   ~~traffic flow; and~~

9   ~~correlating at least one of the ascertained network parameter, transport parameter, next~~

10   ~~hop parameter, and previous hop parameter values with information defining a~~

11   ~~relationship between them and whether a RESV message is desired~~ further

12   comprising the step of, concurrently with the generating and communicating steps,

13   forwarding a second RSVP Path message to one or more devices that are along the

14   anticipated path and that are between the proxy node and the anticipated receiver,

15   wherein the second RSVP Path message defines a different set of traffic

16   characteristics for the flow initiated by the sender than the first RSVP message.

1 5. (Currently amended) A method as recited in claim 4̶1, wherein determining the network

2   parameter values and ascertaining the transport parameter values includes the steps of

3   determining at least one of the source and receiver IP addresses, source and receiver port

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4   numbers, and transport protocol based on values carried in objects in the first RSVP Path

5   message.

1   6.   (Currently Amended) A method as recited in claim 4_1, wherein determining the

2   anticipated traffic flow characteristics includes determining at least one of the rate and

3   size of packets associated with the anticipated traffic flow.

1   7.   (Currently amended) A method as recited in claim 4_1, further comprising the steps of

2   extracting one or more additional anticipated traffic flow attributes from the first RSVP

3   Path message.

1   8.   (Original) A method as recited in claim 7, wherein the anticipated receiver is an IP phone,

2   and further comprising the step of determining at least one quality of service parameter

3   associated with the anticipated traffic flow.

1   9.   (Canceled)

1   10.   (Currently amended) A method as recited in claim 1, wherein the step of detecting an

2   RSVP Path message comprises the step of detecting an the first RSVP Path message

3   associated with the anticipated receiver of the anticipated traffic flow at a proxy node that

4   is logically positioned adjacent to the path.

1   11.   (Currently amended) A computer readable medium comprising one or more sequences of

2   instructions for facilitating an RSVP reservation process, for an anticipated traffic flow

3   anticipated to be received by an anticipated receiver that cannot facilitate an RSVP

4   reservation process for the anticipated traffic flow, wherein when the instructions are

5   executed by one or more processors, the instructions cause the one or more processors to

6   carry out the steps of:

7   detecting an a first RSVP Path message associated with the anticipated receiver of the

8   anticipated traffic flow at a proxy node located within the path;

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9		determining whether to establish the network resources reservation;
10		generating an RESV message to reserve network resources for the anticipated traffic
11		flow; ~~and~~
12		communicating the RESV message to the anticipated source of the anticipated traffic
13		flow;
14		wherein the step of determining whether to initiate an RSVP reservation process includes
15		the steps of:
16		determining one or more network parameter values associated with the anticipated
17		traffic flow;
18		determining one or more transport parameter values associated with the
19		anticipated traffic flow;
20		determining next and previous hop parameter values associated with the
21		anticipated traffic flow; and
22		correlating at least one of the ascertained network parameter, transport parameter,
23		next hop parameter, and previous hop parameter values with information
24		defining a relationship between them and whether a RESV message is
25		desired.

1	12.	(Original) A computer-readable medium as recited in claim 11, further comprising the
2		step of determining one or more device and traffic parameter values associated with the
3		anticipated traffic flow, and wherein the step of generating the RESV message comprises
4		the step of generating the RESV message based on at least one of the device and traffic
5		parameter values.

1	13.	(Currently amended) A computer-readable medium as recited in claim 11, further
2		comprising the steps of:
3		receiving predefined policy information; and
4		generating the RESV message based on the predefined policy information.

1	14.	(Currently amended) A computer-readable medium as recited in claim 11, ~~wherein the~~
2		~~step of determining whether to initiate an RSVP reservation process includes the steps of:~~

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3		determining one or more network parameter values associated with the anticipated traffic
4		flow;
5		determining one or more transport parameter values associated with the anticipated traffic
6		flow;
7		determining next and previous hop parameter values associated with the anticipated
8		traffic flow; and
9		correlating at least one of the ascertained network parameter, transport parameter, next
10		hop parameter, and previous hop parameter values with information defining a
11		relationship between them and whether a RESV message is desired
12		further comprising the steps of, concurrently with the generating and communicating
13		steps, forwarding a second RSVP Path message to one or more devices that are
14		along the anticipated path and that are between the proxy node and the anticipated
15		receiver, wherein the second RSVP Path message defines a different set of traffic
16		characteristics for the flow initiated by the sender than the first RSVP message.
1	15.	(Currently amended) A computer-readable medium as recited in claim 1411, wherein
2		determining the network parameter values and ascertaining the transport parameter values
3		includes the steps of determining at least one of the source and receiver IP addresses,
4		source and receiver port numbers, and transport protocol based on values carried in
5		objects in the first RSVP Path message.
1	16.	(Currently Amended) A computer-readable medium as recited in claim 1411, wherein
2		determining the anticipated traffic flow characteristics includes determining at least one
3		of the rate and size of packets associated with the anticipated traffic flow.
1	17.	(Currently amended) A computer-readable medium as recited in claim 1411, further
2		comprising the steps of extracting one or more additional anticipated traffic flow
3		attributes from the first RSVP Path message.

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1   18.   (Original) A computer-readable medium as recited in claim 17, wherein the anticipated
2   receiver is an IP phone, and further comprising the step of determining at least one quality
3   of service parameter associated with the anticipated traffic flow.

1   19.   (Canceled)

1   20.   (Currently amended) A computer-readable medium as recited in claim 11, wherein the
2   step of detecting an RSVP Path message comprises the step of detecting an the first
3   RSVP Path message associated with the anticipated receiver of the anticipated traffic flow
4   at a proxy node that is logically positioned adjacent to the path.

1   21.   (Currently amended) A system for establishing a network resources reservation for an
2   anticipated traffic flow along a path in a network between an anticipated source and an
3   anticipated receiver of the traffic flow, wherein the anticipated receiver otherwise cannot
4   facilitate establishing the network resources reservation, the system comprising:
5   means for detecting an a first RSVP Path message associated with the anticipated receiver
6   of the anticipated traffic flow at a proxy node located within the path;
7   means for determining whether to establish the network resources reservation;
8   means for generating an RESV message to reserve network resources for the anticipated
9   traffic flow; and
10   means for communicating the RESV message to the anticipated source of the anticipated
11   traffic flow; and
12   wherein the means for determining whether to initiate an RSVP reservation process
13   includes:
14   means for determining one or more network parameter values associated with the
15   anticipated traffic flow;
16   means for determining one or more transport parameter values associated with the
17   anticipated traffic flow;
18   means for determining next and previous hop parameter values associated with the
19   anticipated traffic flow; and

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20   <u>means for correlating at least one of the ascertained network parameter, transport</u>

21   <u>parameter, next hop parameter, and previous hop parameter values with</u>

22   <u>information defining a relationship between them and whether a RESV message is</u>

23   <u>desired</u>.

1   22.   (Currently amended) A network device that can establish a network resources reservation

2   for an anticipated traffic flow along a path in a network between an anticipated source

3   and an anticipated receiver of the traffic flow, wherein the anticipated receiver otherwise

4   cannot facilitate establishing the network resources reservation, the network device

5   comprising:

6   a network interface;

7   a processor coupled to the network interface and receiving network messages from the

8   network through the network interface;

9   a computer-readable medium comprising one or more stored sequences which, when

10   executed by the processor, cause the processor to carry out the steps of:

11   detecting ~~an~~ <u>a first</u> RSVP Path message associated with the anticipated receiver of

12   the anticipated traffic flow at a proxy node located within the path;

13   determining whether to establish the network resources reservation;

14   generating an RESV message to reserve network resources for the anticipated

15   traffic flow; ~~and~~

16   communicating the RESV message to the anticipated source of the anticipated

17   traffic flow<u>; and</u>

18   <u>wherein the step of determining whether to initiate an RSVP reservation process</u>

19   <u>comprises the steps of:</u>

20   <u>determining one or more network parameter values associated with the anticipated</u>

21   <u>traffic flow;</u>

22   <u>determining one or more transport parameter values associated with the</u>

23   <u>anticipated traffic flow;</u>

24   <u>determining next and previous hop parameter values associated with the</u>

25   <u>anticipated traffic flow; and</u>

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26   correlating at least one of the ascertained network parameter, transport parameter,

27   next hop parameter, and previous hop parameter values with information

28   defining a relationship between them and whether a RESV message is

29   desired.

1   23.   (New) A system as recited in claim 21, further comprising means for determining one or

2   more device and traffic parameter values associated with the anticipated traffic flow, and

3   wherein the means for generating the RESV message comprises means for generating the

4   RESV message based on at least one of the device and traffic parameter values.

1   24.   (New) A system as recited in claim 21, further comprising:

2   means for receiving predefined policy information; and

3   means for generating the RESV message based on the predefined policy information.

1   25.   (New) A system as recited in claim 21,

2   further comprising means for forwarding, concurrently with operation of the means for

3   generating and the means for communicating, a second RSVP Path message to

4   one or more devices that are along the anticipated path and that are between the

5   proxy node and the anticipated receiver, wherein the second RSVP Path message

6   defines a different set of traffic characteristics for the flow initiated by the sender

7   than the first RSVP message.

1   26.   (New) A system as recited in claim 24, wherein the means for determining the network

2   parameter values and ascertaining the transport parameter values includes means for

3   determining at least one of the source and receiver IP addresses, source and receiver port

4   numbers, and transport protocol based on values carried in objects in the first RSVP Path

5   message.

1   27.   (New) A system as recited in claim 24, wherein the means for determining the anticipated

2   traffic flow characteristics includes means for determining at least one of the rate and size

3   of packets associated with the anticipated traffic flow.

1   28.   (New) A system as recited in claim 24, further comprising means for extracting one or

2   more additional anticipated traffic flow attributes from the first RSVP Path message.

1   29.   (Previously presented) A system as recited in claim 27, wherein the anticipated receiver is

2   an IP phone, and further comprising means for determining at least one quality of service

3   parameter associated with the anticipated traffic flow.

1   30.   (New) A system as recited in claim 21, wherein the means for detecting an RSVP Path

2   message comprises means for detecting a first RSVP Path message associated with the

3   anticipated receiver of the anticipated traffic flow at a proxy node that is logically

4   positioned adjacent to the path.

1   31.   (New) A network device as recited in claim 22, wherein the one or more stored

2   sequences, when executed by the processor, cause the processor to further carry out the

3   step of determining one or more device and traffic parameter values associated with the

4   anticipated traffic flow, and wherein the step of generating the RESV message comprises

5   the step of generating the RESV message based on at least one of the device and traffic

6   parameter values.

1   32.   (New) A network device as recited in claim 22, wherein the one or more stored

2   sequences, when executed by the processor, cause the processor to further carry out the

3   steps of:

4   receiving predefined policy information; and

5   generating the RESV message based on the predefined policy information.

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1   33.   (New) A network device as recited in claim 22,

2   further comprising instructions for performing the step of, concurrently with the

3   generating and communicating steps, forwarding a second RSVP Path message to

4   one or more devices that are along the anticipated path and that are between the

5   proxy node and the anticipated receiver, wherein the second RSVP Path message

6   defines a different set of traffic characteristics for the flow initiated by the sender

7   than the first RSVP message.

1   34.   (New) A network device as recited in claim 22, wherein determining the network

2   parameter values and ascertaining the transport parameter values includes the steps of

3   determining at least one of the source and receiver IP addresses, source and receiver port

4   numbers, and transport protocol based on values carried in objects in the first RSVP Path

5   message.

1   35.   (New) A network device as recited in claim 22, wherein determining the anticipated

2   traffic flow characteristics includes determining at least one of the rate and size of packets

3   associated with the anticipated traffic flow.

1   36.   (New) A network device as recited in claim 22, wherein the one or more stored

2   sequences, when executed by the processor, cause the processor to further carry out the

3   step of extracting one or more additional anticipated traffic flow attributes from the RSVP

4   Path message.

1   37.   (New) A network device as recited in claim 36, wherein the anticipated receiver is an IP

2   phone, and wherein the one or more stored sequences, when executed by the processor,

3   cause the processor to further carry out the step of determining at least one quality of

4   service parameter associated with the anticipated traffic flow.

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1 38. (Currently amended) A network device as recited in claim 22, wherein the step of

2   detecting an RSVP Path message comprises the step of detecting the first RSVP Path

3   message associated with the anticipated receiver of the anticipated traffic flow at a proxy

4   node that is logically positioned adjacent to the path.

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